DOCUMENT RESUME

ED 242 581 SO 015 301

TITLE	T's and Blues. Specialized Information Service.
INSTITUTION	Do It Now Foundation, Phoenix, Ariz.
PUB DATE	81
NOTE	12p.; For related documents, see SO 015 299-306 and SO 015 453-456.
AVAILABLE FROM	Do It Now Foundation, Box 5115, Phoenix, AZ 85010 ($2.50 each, complete set of 9/$20.95).
PUB TYPE	Collected Works - General (020) -- Journal Articles (080)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Drug Abuse; *Drug Education; Drug Use; Health Education; Higher Education; Secondary Education; Social Problems
IDENTIFIERS	Health; PF Project; Pyribenzamine; Talwin

ABSTRACT

This compilation of journal articles provides basic information on abuse of Talwin, a mild prescription painkiller (T's), and Pyribenzamine, a nonprescription antihistimine (Blues). These two drugs, taken in combination, produce an effect similar to that produced by heroin. Stories from "Drug Survival News," "Emergency Medicine," and "FDA Consumer" focus on the uses of the drugs, side effects, health hazards, and proposed control methods. A selected bibliography concludes the compilation. (LP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED242581

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.
☑ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Christina A Dye

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Do It Now Foundation
Specialized Information Service

T's and Blues

SP 015 301

T's and Blues: The Synthetic Connection

They're called T's and blues most places, but they're known by any number of names in other places. They're "sets" in the housing projects of New Orleans; T's and B's, tops and bottoms, and tricycles and bicycles on the South Side and West Side of Chicago; Teddies and Betties on the near North Side of Indianapolis.

But by whatever name, the new drug combination of Talwin and Pyribenzamine is becoming a big name on the American street drug scene.

by Jim Parker

Photographs by Tom Marx

On paper, the two drugs in T's and blues would appear to have little in common. Talwin is a mild prescription painkiller while Pyribenzamine is a legally-available non-prescription antihistamine. And, while individually the drugs have limited potential for abuse, in combination they can produce a heady euphoria that has been compared favorably by some users to the high produced by medium-grade heroin.

The individual components of the T's and blues combination have figured into the U.S. drug scene in the past, although on nowhere near the scale they currently share. Pyribenzamine, whose generic name is tripellenamine, gained notoriety during the early 1960s in a supporting role similar in many ways to its current role with Talwin. The drug, a blue tablet manufactured as a decongestant, gained the favor of many narcotics users during heroin shortages in combination with paregoric, a camphorated tincture of opium used in the treatment of diarrhea. This combination became known on the street as "blue velvet."

And, although Talwin has been available for less time, it has created no less a stir.

A brand of pentazocine hydrochloride, Talwin was introduced in America by Winthrop Laboratories in injectable form in 1967, in tablet form in 1969. The drug was initially introduced as a non-addictive pain-killer with little or no abuse potential, but was quickly discovered by street dealers and users, who that is soon learned has a fair amount of abuse potential, indeed.

A factor underlying the tremendous expansion of the street Talwin market was the fact that the drug was not considered a controlled substance under the provisions of the Controlled Substance Act until 1979. Thus, prescriptions for Talwin were unrestricted (and unmonitored) during this period, while charges for illicit sales generally were considered only misdemeanor offenses.

Detective David Peralta of the New Orleans Police Narcotics Unit cited legal issues as a major factor in the emergence of T's and blues on the street.

"In Louisiana, you have the 'life law,' meaning that a person found guilty of possession with the intent to distribute heroin faces life in the penitentiary," Peralta said. "For the possession of Talwin, it's zero to five years, and in many cases they get probation. For possession with intent to distribute Talwin, it's only zero to ten years, so they're facing less of a penalty. With the profit margin, they're making the same amount of money dealing Talwin as dealing heroin, so they're taking less of a chance and making the same profit."

As a combination, T's and blues made its initial appearance on the street during the late 1970s. Most observers trace the origin of the combination to Chicago in 1977. "It started in Chicago, but it spread quickly to other Midwestern cities," said Bill Deac of the Drug Enforcement Administration. Deac cited St. Louis, Indianapolis, Detroit, Kansas City, and New Orleans as particular strongholds but indicated that the scope of the T's and blues problem is widening. "Lately, it's even spread into Eastern and Southern cities, including Philadelphia, Buffalo, and Atlanta," Deac said.

Another factor in the spread of T's and blues has been the declining quality of street heroin over the past decade. As heroin purity has plummeted (particularly in the Midwest, due to its distance from points of origin and the tendency for drug potency to decrease as distance—and cuts—increase) Talwin has come to achieve competitive parity with heroin. Lieutenant Lawrence Forberg of the Chicago Police Department cited purity as a major factor in the growth of T's and blues in Chicago. "T's and blues right now is Chicago's largest drug problem," Forberg told us. "And the reason they're using T's and blues is that the quality of heroin is so bad."

Among other explanations for the tremendous expansion of the T's and blues market in recent years has been the combination's predictability. "They know what to expect from T's and blues," Detective Ozzy Osborne of the Indianapolis Police Narcotics Division recently told *DSN*. "It's a pharmaceutical drug and they know what to expect each and every time. With heroin, there's no way of knowing what you're going to get."

Peralta underscored predictability as a factor in T's and blues popularity. "People are more apt to buy Talwin and Pyribenzamine because it's readily identifiable, whereas with heroin you're buying an unknown powder and you don't know for sure what you're getting."

The effects of T's and blues in combination seems to be qualitatively different than their individual effects separately, with the role of Pyribenzamine complimentary to that of Talwin. The blue antihistamine has a slight stimulant property and speeds the onset of Talwin's effects as well as lenthens the analgesia and euphoria produced by the painkiller.

The drugs are usually taken in a preferred ratio of two or three parts Talwin to one part Pyribenzamine. However, with the decreasing availability of Talwin in many areas, the T to blue ratio is often reduced to 1:1 (although this lower ratio produces too "speedy" a high for many users.

And although some users can get an adequate high from a one-tablet "set" of Talwin and Pyribenzamine, tolerance quickly develops. Dosage levels for long-term T's and blues users can range from 200 to 600 mg Talwin taken with 100-200 mg of Pyribenzamine.

Users crush Talwin and Pyribenzamine tablets prior to adding water to the mixture, and strain the solution through cotton or a cigarette filter. The crushing process is made necessary since Pyribenzamine resists disintegration in a water solution.

Effects of an intravenous injection of T's and blues are almost immediate. An initial heroin-like "rush" gradually levels into a dreamlike state of euphoria, which lasts from one to four hours, depending on dosage level and user tolerance.

The objective effects of the drugs are similar to the sedative and analgesic effects produced by synthetic and opiate narcotics. While Talwin combines relatively strong

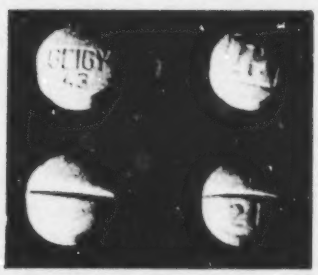
2

agonist (morphine-like) and weak antagonist (morphine-blocking) properties, Pyribenzamine is thought to have a cocaine-like stimulant effect on sympathetic nervous system activity. The combination of the two sets of effects result in the powerful, heroin-like rush of euphoria that's come to be associated with T's and blues.

Adverse effects linked to use of the drugs include nausea, vomiting, nallucinations, headache, and unconsciousness. Irritation and burning at the site of the injection are other frequently reported adverse effects along with noticeable tissue swelling. Convulsive seizures have also been linked to T's and blues use, with the risk of seizures believed to be dependent upon the level of Pyribenzamine in the combination.

A number of major health hazards have also been tied to T's and blues. In fact, T's and blues in many ways seem more dangerous than heroin.

Dr. Louis Caplan, chief of neurology at Chicago's Michael Reese Hospital, has studied the combination extensively, and has classified four main groups of health hazards that he has linked to T's and blues, including seizures, stroke, central nervous system infection, and immune system responses to the drug.



Dr. Caplan believes that many of the dangers linked to T's and blues are produced by insoluble talc crystals that are added to both drugs during manufacture as a binding agent to hold the tablets together. "When a pill is made for oral use, the presumption by the company is that the acid in the stomach will work on it and won't get into the bloodstream," Caplan told us in a recent interview. "Nobody in their right mind injects pills that are meant for oral use."

Dr. Caplan believes that the presence of talc crystals contributes to many of the more significant dangers associated with T's and blues use, including hemorrhaging, convulsions, and major systemic infections.

Caplan, who became interested in the combination after examining a T's and blues-related stroke victim several years ago, said he believes that the foreign material in T's and blues "creates a tremendous amount of problems. The likelihood of chronic damage from T's and blues, therefore, is probably quite high."

Dr. Caplan described the dangers of talc crystals in the drugs as a "two-fold problem. One is infection, which can spread, and the other is that foreign particles can get into the bloodstream and block the vessels."

As described by Dr. Caplan, the mechanism by which talc crystals wreak their havoc is fairly complex and involves numerous organ systems. The insoluble particles are filtered first by blood vessels in thes lungs, which ordinarily filter bacteria and other impurities from the body.

"As foreign bodies," Dr. Caplan told us, "they (the talc crystals) evoke a reaction in the lungs and the reaction...makes the blood vessels very fibrous and small. That in turn puts more resistance on the heart and produces what many people have called pulmonary hypertension or right ventrical strain. In other words, in order for the heart to pump harder, so the pressure in the lung beds gets greater. And that can lead to heart problems."

Dr. Caplan has also traced other serious health problems to the clogging of lung capillaries with foreign particles contained in T's and blues.

The more serious dangers associated with T's and blues are being linked to talc crystals in Talwin and Pyribenzamine tablets.

"The lungs are usually an efficient filter," Caplan said. "But when they get clogged up, material that the lungs would ordinarily filter goes into the bloodstream and can go to the brain or to the spleen or to the kidneys or other organs. The lungs are also an efficient filter for bacteria, but many people who shoot T's and blues don't sterilize the equipment and they just shoot it. Now filtering it, it may go into your bloodstream and you've got a serious infection."

Dr. Caplan sees the danger of increasing levels of damage directly related to duration of use. "Each time you shoot, if you do it in an unsterile manner, you're taking a risk. If you take a risk a hundred times, you're more likely to be bitten one of those times. Also, each time you shoot perhaps a little bit of the (foreign) material gets into your lungs. If you've been shooting for a year or two, your lungs become less and less effective as a filter."

The more serious health hazards that develop with long-term use of the drug may be related to the breakdown of the filtering capacity of the lungs. As the lungs become increasingly inefficient as filters due to prolonged capillary damage, more foreign materials are circulated to other organ systems, including the brain, liver, and kidneys. Accumulation of the material in the brain can result in hemorrhage of brain tissue or occlusion of blood vessels in the brain. Build-up of the material in other organs can cause similar problems.

Additionally, serious central nervous system infection can result from prolonged exposure to T's and blues. In his research, Dr. Caplan has documented three such cases. "Two of those three patients were very seriously ill," Caplan said. "Two are paralyzed and one died. so the infection, when it comes, can be awfully serious."

Health hazards associated with the combination have become more prevalent as use has increased. Although the DEA indicates that T's and blues are gradually radiating out from their Midwestern base, use of the drugs is still heavily concentrated in a band of cities along a Midwestern corridor extending from Detroit in the North to New Orleans in the South. In fact, according to figures made available by the DEA for 1980, Chicago and New Orleans alone account for over 25 percent of total hospital mentions involving Talwin (613 and 321 mentions respectively, out of 3,669 nationwide).

Most observers of the current T's and blues street scene see the combination as a replacement for heroin.

"This thing is a substitute for heroin among a fringe addict population," the DEA's Bill Deac told us. "For a true addict T's and blues are not enough."

But other observers of the T's and blues scene see an entirely new addiction picture emerging: new addicts weaned on T's and blues, preferring the combination for reasons unrelated to the actual high. "It's getting bigger and bigger here," said Indianaplois Detective Osborne. "A junkie knows what to expect with this stuff. There's no way he can get ripped off or get slipped a 'hot shot' (a fatal overdose or contaminated dose of heroin)."

Sgt. John Perry of the Kansas City Narcotics Unit concurred. "Talwin's not a heroin substitute. You're talking about two different types of people that would shoot Talwin and shoot heroin."

But regardless of the precise psychodynamic mechanism involved in the self-selection of T's and blues users, one thing is abundantly clear— there's more than enough of them to go around. Hospital admissions involving Talwin rose in 1980 at a rate of 16.8% above 1979, and indications are that a similar increase will be reflected in 1981 totals. Precisely how much may very well be tied to the quality and price of heroin available in months ahead. But, for the present, the T's and blues combination is quietly making a name for itself on the streets of American cities.

"People know what to expect from T's and blues. With heroin, there's no way of knowing what you're going to get."

It, and drugs like it—the "China White"-fentanyl phenomenon of last winter comes immediately to mind—are products of the newest drug connection on the American street drug scene, and this new synthetic connection may just turn out to be the toughest connection of all to crack.

3

REPRINTED FROM

Drug Survival News

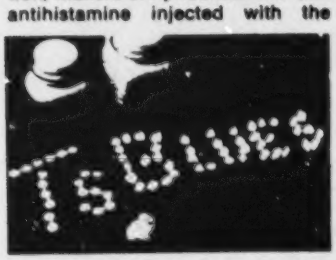
Page 10 • Drug Survival News • April 1982

DSN FLASHBACKS

T's and Blues Control Measures Planned

Manufacturers of the chemical constituents of "T's and blues" are proceeding with plans that would eliminate use of their products in the street drug combination.

According to a company spokesman, Ciba-Geigy Corporation, makers of Pyribenzamine®, an antihistamine injected with the



analgesic Talwin® in the combination, is reviewing a number of options to curb use of its product in T's and blues, including a complete phase-out of Pyribenzamine tablets.

Talwin manufacturer Winthrop Labs recently filed a request with the U.S. Food and Drug Administration for permission to add naloxone hydrochloride (Narcan®) to Talwin, according to a Winthrop spokesman. Naloxone, a narcotic antagonist which blocks the depressant effects of narcotics, is widely used in treatment of narcotic overdose.

According to the Winthrop spokesman, naloxone is neutralized by the gastrointestinal system when taken orally and would only block the narcotic effects of the drug upon injection.

"If injected into someone who is not an addict, (naloxone) would render the T's and blues combination ineffective," he explained. "But, if it's injected into an addict, it could stimulate withdrawal symptoms."

Reprinted from;
Emergency Medicine
New York, N.Y.
15 December 1980

A DOUBLE DOSE OF DRUG ABUSE

THERE'S A NEW type of abuse on the drug scene that's turning out to be more than just another fad. Some addicts have discovered they can get a "rush" from injecting a combination of pentazocine and tripelennamine—referred to in street language as Ts and blues—and many drug users now prefer this mixture to heroin.

This is a form of drug abuse that physicians across the country are going to have to be prepared to deal with, says Dr. Craig V. Showalter, who is medical director of the Substance Abuse Services in Chicago. "We've had a serious problem in Chicago for three or four years and it's spreading. Ts and blues abuse is becoming increasingly common in New Orleans, for example, and it's being seen in St. Louis, Ohio, Pennsylvania, and to some extent in New York. Physicians on the West Coast haven't reported seeing Ts and blues addicts yet but sooner or later they probably will."

"Ts" is the slang name given to pentazocine (*Talwin*) tablets, while "blues" refers to the blue tripelennamine (*Pyribengamine*) tablets. "The street names may change a bit with the location," notes Dr. Showalter. "I've heard of different terms based on the letters *T* and *B*, like 'tops and bottoms' or 'tricycles and bicycles.' And I've heard that in Harlem it's been called Ts and critters. But basically most street addicts refer to this combination as Ts and blues."

Pentazocine, a nonnarcotic analgesic, is a relative newcomer to the street scene, the Chicago physician told EM. "Until recently, pentazocine abuse was limited mostly to the medical community. It's been avoided by regular heroin users, probably because of its mild narcotic antagonist action. Pentazocine is addictive and maternal addiction has resulted in withdrawal symptoms in the neonate. Psychiatric disturbances associated with pentazocine abuse include dysphoria, depression, confusion, and hallucinations, either while under the influence of the drug or during withdrawal. Pentazocine was recently placed in Schedule IV of the Controlled Substances Act."

Tripelennamine, an antihistamine of the ethylenediamine class, has no demonstrated addiction potential, Dr. Showalter reports in *JAMA* (Vol. 244, p. 1224). The drug has been used by street addicts for over 20 years, although its abuse has not been widespread until recently. Since it may produce an unpleasant "speeding" effect and seizures, tripelennamine is rarely used alone. The drug, also known as blue velvet among street addicts, was often used in combination with paregoric, heroin, or morphine.

Apparently when used together, pentazocine and tripelennamine act in such a way that the undesirable effects from the intravenous use of either alone are lessened or eliminated, says Dr. Showalter. "The effects of this combination are very similar to those of good-quality heroin. Initially, most Ts and blues users were heroin addicts who were forced to use something else when heroin was in short supply. But because of the declining potency and rising costs of heroin, addicts are seeking more predictable and cheaper highs. Now some addicts prefer Ts and blues over heroin, while others have never used heroin at all."

Most addicts prefer to combine the drugs in a ratio of two 50-mg pentazocine tablets to one 50-mg tripelennamine tablet, notes the Chicago physician. But since pentazocine has been rescheduled and is more difficult to come by, the ratio is frequently one to one, and when the drugs are injected in this proportion seizures are common. *continued*

To prepare the tablets, the drug user crushes them, dissolves them in water, and strains the liquid through cotton; then he injects the mixture intravenously. The effect is an immediate rush, which lasts 5 to 10 minutes. The initial effects are soon followed by dysphoria, so the injections are repeated as long as the drug supply lasts. After three to four injections, the rush may be followed by a feeling of well-being that lasts an hour or two and then subsides over the next two to four hours.

Pentazocine and tripelennamine tablets are frequently obtained through legal prescriptions, notes Dr. Showalter. "A lot of physicians consider pentazocine tablets to have little potential for abuse since they may cause nausea and dysphoria when taken orally. You should be suspicious when a patient claims he's allergic to everything but pentazocine or that only pentazocine works for him. I always get suspicious when someone really pushes to get a particular drug, although it can be a legitimate request."

You are most likely to see the Ts and blues abuser complaining of serious medical complications from his habit. "They come in because they hurt," Dr. Showalter told EM. "Intravenous pentazocine abuse frequently leads to vasculitis or muscle fibrosis, which sometimes results in a limited range of motion of the extremities. The abuser may suffer from severe skin ulcerations and woody indurations that are very unlike the skin lesions associated with other types of drug abuse. Severe cellulitis is common and it may be more serious than it looks on initial examination. I've heard of horrendous problems in which physicians have explored the cellulitis and found such extensive necrosis that whole muscle bodies had to be removed. Severe pulmonary problems are also commonly seen, mostly when the tablet form of tripelennamine is used. The most common pulmonary problems are talc angiothrombosis, talc granulomas, and pulmonary hypertension. And of course these addicts can also suffer from such common complications of intravenous drug abuse as hepatitis, septicemia, and endocarditis."

Making the diagnosis will probably not be very difficult, says the Chicago physician. "When a person comes in with a number of abscesses, you usually suspect drug abuse. Your index of suspicion should be particularly high when you see severe ulcerations, because these are characteristic. And you should always suspect Ts and blues when someone you suspect of drug abuse comes in with impaired pulmonary function. Some of these addicts may give a history of Ts and blues abuse when questioned."

The withdrawal syndrome is usually mild, consisting of restlessness, irritability, gastrointestinal upset, mild abdominal cramping, and drug craving. "Hospitalization for the withdrawal symptoms is rarely indicated," Dr. Showalter told EM. "If necessary, you can give therapeutic doses of a benzodiazepine and then taper the amount gradually over a period of a few days."

Abuse of Ts and blues is a recent enough phenomenon that little is known about the best way to approach long-term treatment. "*Darvon N*, which had sometimes been effective, has been prohibited by law for the treatment of any drug addiction, so we can no longer use that," says Dr. Showalter. "Low-dose methadone maintenance—5 to 10 mg a day—has been shown to work in some cases but there have been no formal studies. Pharmacologically, it makes sense since pentazocine acts on the opiate receptors. But using methadone in this situation is controversial since methadone's addiction potential is much greater than that of pentazocine. Nevertheless, since the medical consequences can be so serious, low-dose methadone maintenance should be considered in treating chronic Ts and blues abusers. It's also important that the addict be placed in a drug treatment program, preferably a residential program that offers ongoing psychological services and counseling beyond the drug withdrawal phase. Most Ts and blues users adapt very well to this setting since they identify with the street crowd." □

The Saga of T's and Blues

Talwin or pentazocine, a prescription painkiller, has been on the market for several years. But recently it was put on Schedule IV of the Controlled Substances Act and now can be refilled only 5 times in 6 months. Why it was put on that limited schedule is a story of "T's and Blues" and how an ordinary prescription drug becomes a drug of abuse.

by Annabel Hecht

"T's and Blues." The phrase may sound like a song title, but it is, in reality, street jargon for a combination of drugs that is being used as a substitute for heroin.

Chicago TV reporter Peter Karl said he first learned of T's and Blues from a prostitute who was being treated for drug abuse in a local hospital. The end result of this interview, 7 months later, was a TV documentary that "blew the lid" off a newly emerging drug abuse problem that was sweeping Chicago's south and west sides and spreading into the suburbs. What was perhaps more shocking – the taxpayers were footing some of the bill.

At the same time, FDA and the Drug Enforcement Administration (DEA), whose sources were less esoteric than Karl's, were taking steps to bring under Federal controls the "T" in the combination. T stands for Talwin, a prescription painkiller. Its generic name is pentazocine.

Talwin mixed with an antihistamine, Pyribenzamine, and injected can produce a "rush" or "high" as good or better than heroin. Pyribenzamine is sold as a blue tablet, hence the street name, T's and Blues. As street supplies of heroin have become scarce, expensive, and of poor quality, addicts have turned to T's and Blues as a cheap and readily available substitute. Euphoria isn't all they are getting for their money, however. Overdoses of Talwin can cause psychotic effects and may result in convulsions, coma, and possibly death.

Chicago wasn't the first area where T's and Blues were used. In 1977 reports of abuse of the combination turned up in such cities as Syracuse and Cincinnati. Drug wars over street distribution rights led to six deaths in St. Louis. Nothing, however, approached the size of the operation in Chicago.

Peter Karl's TV cameras filmed "storefront" clinics where "patients" from all over the city, carrying public assistance medical cards, could get a week's supply of Talwin, Pyribenzamine, Valium, and paraphernalia such as syringes and cotton balls just by walking in.

Copies of checks and Medicaid records obtained from one clinic revealed its owners had received more than half a million dollars in payments between January 1, 1978, and the time the TV program was aired. This clinic, according to the TV account, issued more prescriptions for T's and Blues than any other in the entire State of Illinois. Dealing in the new drug combination is big business on the street. "T's and Blues are being passed out on the street like candy," Peter Karl reported. "Intelligence from narcotics agents say that druggists are main suppliers and wholesale distributors are delivering the pills by the millions . . . Street gangs known for extortion and gambling are now fighting on the street for control of the T's and Blues market."

What made it so easy for the new form of drug abuse to flourish was the fact that both drugs were legal and neither was "controlled." This means there were no restrictions on the amount that could be prescribed, nor the number of refills that could be dispensed. Records on distribution were not required. Drug abuse authorities were caught off guard when the combination appeared on the streets. No one realized that such a combination had been tried. No research had been done; nothing had been written about it. As a result of this experience FDA has asked the National Institute of Drug Abuse to search for other possible drug abuse combinations involving Talwin. Taken according to directions, both Talwin and Pyribenzamine are safe and effective. However, Talwin does have a potential for abuse, which has been recognized for many years. It came on the market in 1967 as an injectable analgesic. The tablet form was introduced in 1969. The result

Reprinted from *FDA Consumer*, Vol. 13(2): 10-11, March 1979. *FDA Consumer* is the official magazine of the Food and Drug Administration.

of a search for a painkiller lacking the abuse and dependence-producing properties of morphine, Talwin is a mixture of agonist (morphine-like) and antagonist (morphine-blocking) effects. It was believed that this combination of effects would not produce physical dependence and that the drug would not be used as a substitute for morphine or heroin by persons addicted to these drugs.

This belief was shattered early on. Reports of abuse began to turn up in 1968. The following year the manufacturer sent a "Dear Doctor" letter to physicians throughout the United States and Canada indicating that initial hopes for the drug had not been realized. Physician labeling was changed to include a prominent warning calling attention to the drug's potential for dependence.

Despite these warnings, abuse of Talwin continued. In 1969, 1970, and 1972 DEA's predecessor, the Bureau of Narcotics and Dangerous Drugs, surveyed State and local agencies dealing with drug abuse problems and in each year learned that Talwin was being found in possession of some persons arrested for drug offenses; that the drug was implicated in thefts from nursing homes, hospitals, and pharmacies; and that it was being obtained on false prescriptions. In many cases the drug had been used initially for legitimate medical reasons.

From these and other sources the Bureau also learned that Talwin is a drug with special appeal to those associated with health care. Case after case was reported involving doctors, nurses, their spouses, and even their children. The fact that the drug was inexpensive, available, and not controlled partially explains why Talwin abuse in the medical professions appears to be disproportionate to that in the general population.

DEA gathered these facts in 1974 and submitted them to FDA with the recommendation that Talwin be controlled. Under the provisions of the Controlled Substances Act, a drug can be put under Federal restrictions only on FDA's recommendation, based on the Agency's evaluation of appropriate medical and scientific evidence.

That recommendation must be based on one or more of these findings: that people are taking the drug in amounts sufficient to be a hazard to health or to the safety of others in the community; that it is being diverted from regular drug channels; that people are taking it on their own rather than on the advice of a physician; or that the drug is so like another controlled substance that it is likely to be abused.

Although there were reports of abuse of pentazocine at that time, the abusers appeared to be limited to members of the health professions who had access to the drug and to others who had legitimate prescriptions from physicians. It wasn't yet a problem on the streets. On the basis of information then available, FDA decided not to recommend control for pentazocine.

In announcing results of the review by the Agency's Controlled Substances Advisory Committee and its Drug Abuse Staff, HEW Assistant Secretary for Health Charles C. Edwards, M.D., said, "Although reports on abuse and dependency with pentazocine have all been documented, the actual or potential risk to public health associated with such abuse does not at the present time seem to be sufficiently well defined to warrant control." FDA did ask DEA to continue to monitor trends and abuse of the drug with a promise to reconsider control if new data were found to support it.

Within a few years new information was forthcoming. In December 1977 DEA again presented data to FDA with a recommendation to control pentazocine. Extensive documentation of the drug's abuse potential came from animal studies, case records, and the medical literature. Reports from the Drug Abuse Warning Network (DAWN) presented a picture of a drug generally obtained by legal prescription and to a large extent associated with suicide attempts. The data also suggested that the drug was obtained often from illegal sources and used for its euphoric effect.

By 1977 12 States already had imposed control over pentazocine and three more were contemplating such action, according to DEA. A year later the number of States controlling the drug reached 16 and an additional three had proposed control. One of the first was South Carolina, where evidence to support control included abuse cases, fraudulent prescriptions, and illegal sales. Among the cases cited was that of the daughter of a physician who stole injectable Talwin from her father. She was caught in the act of injecting the drug into the arm of a neighbor.

Coupled with this evidence was the unfolding story of the abuse of T's and Blues. A DEA pharmacist, appearing before FDA's Controlled Substances Advisory Committee in March 1978, reported on a case in Chicago which clearly established pentazocine as a drug of abuse. City investigators audited records of a local wholesaler and found that 18 pentazocine orders were filled for one pharmacy in a 3-month period. A check of the pharmacist's records found a discrepancy of approximately 1.5 million pentazocine and Pyribenzamine tablets between the amount ordered and the amount used to fill legitimate prescriptions. This represents $5 million at the price addicts were paying on the street. A diversion of this size is possible with uncontrolled drugs, according to DEA, because they are not subject to audits and inventory controls and investigators cannot see sales records except with a court order. Chicago authorities were able to build a case because they suspected a problem existed.

On the basis of this and other evidence including reports of newborn babies addicted to pentazocine as a result of abuse by mothers during pregnancy, FDA recommended that DEA put pentazocine into Schedule IV of the Controlled Substances Act. DEA issued the final order January 10, making the scheduling effective 30 days later, on February 9, 1979.

Under Schedule IV, a prescription can be refilled only 5 times every 6 months. Strict accounting and record-keeping is required of manufacturers, drug wholesalers, pharmacies, and other legitimate handlers. Pharmacies are subject to routine investigations and audits of those records. Federal criminal penalties for the illegal handling of Schedule IV drugs can bring up to 3 years in prison and/or a $10,000 fine for the first offense, and double that for subsequent offenses.

While controlling such drugs as Talwin may not wipe out their abuse overnight, it can help curtail illegal street distribution.

Annabel Hecht is a staff writer with FDA's Office of Public Affairs.

Ts, Blues abuse 'very serious' in New Orleans...

WASHINGTON — Abuse of Ts and Blues (Talwin and Pyribenzamine) has reached "extremely serious" proportions in New Orleans and the number of female abusers is rising so rapidly they may soon outnumber males.

This was the pessimistic report of Willie Jackson, Veterans Administration Medical Center, New Orleans, to the National Alcohol and Drug Coalition meeting here. Mr Jackson got most of his information by walking the streets and talking to abusers, their families, and friends.

He said the average age range of abusers is from 12 to 36 years old; and "most prominent among the new breed are school-aged children and young mothers who have turned to a life of prostitution to support their habit."

Mr Jackson said he believes more blacks than whites use Ts and Blues and most live in poor sections of the city.

Mr Jackson said interviews with school-aged children show they become involved with Ts and Blues by idolizing older children who are abusers; being swayed by the argument of abusers that the habit will make them think better and receive better grades; being led to think "this super trip Ts and Blues takes you on actually allows you to see other people and things that squares don't or can't see."

Most young mothers said they were turned on to Ts and Blues by their men. A major reason they gave was that doctors will write prescriptions for the drugs much faster for women than men. Script doctors charge $35 each for Talwin and Pyribenzamine prescriptions.

Mr Jackson said some pharmacists are also exploiting the abusers: they will not fill prescriptions for the drugs unless the abusers purchase from $32 to $80 worth of goods from the store.

He said abusers claim "they never have, and never will, shoot heroin because that is not their bag. They bitterly detest even being remotely compared with heroin addicts."

Most long time heroin addicts told Mr Jackson they are dedicated Ts and Blues abusers now because they never know what the quality of heroin will be, and because heroin is more expensive. Heroin sells for $25 a "bag" while Ts and Blues go for $10 a "set" and sometimes two "sets" for $15.

...a heroin substitute in the midwest

LAS VEGAS — Ts and Blues appear to be serving as a heroin substitute in the Middle West of the United States, including one city nestled against the Canadian border — Detroit.

John R. Lumpkin told the American College of Emergency Physicians here that many intravenous users of Talwin and Pyribenzamine, the latter in the form of a blue tablet, are winding up in emergency rooms.

Brown heroin

He said Ts and Blues seems to be a phenomenon of the Middle West cities, including Chicago, Detroit, and St Louis. (See related story.)

While use appears to be on a decline at the moment, he said, he suspects that is because it's "inversely related to the availability of brown heroin.

The combined use of these two drugs, Dr Lumpkin said, began in the area only a year or so ago, although each of the drugs had been abused separately, or with other agents, for 10 or 12 years.

Tissue reactions

"When it first hit the street, the addicts thought it was a way of kicking heroin," he told **The Journal**. "It was thought to be as effective in producing a high as heroin, with the Pyribenzamine, an anti-histamine, giving an extra kick to it. The pills were crushed up, dissolved in water, and then injected.

"That creates certain problems that we saw in our cases, because they put talc crystals in the pills so they don't get stuck in the presses, and those talc crystals cause tissue reactions. There have been reports of granulomas (nodular, inflammatory lesions) in the lungs and liver, as well as fibrotic lung disease. In our series we saw four cases of seizures, and we believe the talc crystals may have been the cause of these seizures."

The physicians at the University of Chicago hospitals and clinics emergency department, he added, also saw a wide variety of other symptoms in these abusing patients.

'Tox screens'

He recommends the "tox screens" available in many hospitals to point to drug ingested. University of Chicago residents are now being asked to do this routinely.

The reason for the recommendation, he added, is also that "we're concerned with what's out there . . . not so much for the patient today, but for the one who's here tomorrow."

Reprinted from:
The Journal
Addiction Research Foundation
Toronto, Ontario
Volume 9, No. 11
1 November, 1980

SELECTED BIBLIOGRAPHY

1. Lahmeyer, Henry W., M.D., and Rose G. Steingold, M.D.; "Medical and Psychiatric Complications of Pentazocine and Tripelennamine Abuse;" *Journal of Clinical Psychiatry*, 41 (8); August, 1980; p. 275-78.

   A study of Chicago veterans' illicit drug use was made from 1973 to 1979. A seven-fold increase in pentazocine was seen. Medical or psychiatric complications included seizures, abscesses, depression, and psychosis. These occured in 64 out of 69 pentazocine and tripelennamine users. Most cases started using these drugs in an attempt to withdraw from heroin or because of the poor quality of available heroin.

2. Showalter, Craig V., M.D.; "T's and Blues: Abuse of Pentazocine and Tripelennamine;" *Journal of the American Medical Association*, 244, (11); September 12, 1980; p. 1224-25.

   Patterns of abuse, medical complications, and treatment considerations are presented. Physicians need to be aware of the abuse of these drugs since pentazocine in tablet form is generally considered to have a low abuse potential.

3. Poklis, Alphonse, Ph.D., and P. L. Whyatt, Ph.D.; "Current Trends in the Abuse of Pentazocine and Tripelennamine: The Metropolitan St. Louis Experience;" *Journal of Forensic Sciences*, 25 (1); January, 1980; p. 72-78; rpt. in *Grassroots*, May, 1980; p. 25-28.

   Discussion of combination use in St. Louis, including information taken from interviews with area drug addicts. Adverse effects of abuse are listed, and include nausea, headache, vomiting, convulsions, loss of consciousness, seizures, and central nervous system excitation. Also discusses possible dangers associated with intravenous drug use, and the injection of insoluble tablet particle matter posing threats of infection, pulmonary occlusion disease, thrombosis, and fibrosis.

4. "The Cheap New Killer;" *Time*, July 20, 1981; p. 26.

   News article stating that hospitals reported 3,669 cases admitted relating to T's and Blues use last year. Use is currently speculated to be greater than heroin.

5. "T's and Blues;" *Street Pharmacologist*, 2 (3); 1979.

   Short article reporting reclassification of pentazocine as a Schedule IV controlled substance by the Drug Enforcement Administration, February 8, 1979.

6. Wadley, Calvin, M.D., and Gordon D. Stillie, D.O.; "Pentazocine (Talwin) and Triplennamine (Pyribenzamine): A New Drug Abuse Combination or Just a Revival?" *The International Journal of the Addictions*, 15 (8), 1980; p. 1285-90.

   Interview of eight drug abusers at Cook County Emergency Department. Currently T's and Blues users, all had previous heavy experience with heroin. Literature review included revealed similarity between T's and Blues and "Blue Velvet," the combination of pyribenzamine and opiates, particularly paragoric, which was popular in the 1950s.

10